

## Press Release

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For Immediate Release  
May 21, 1993

### **ASTA Awards \$401,435 in Grants, Traineeships**

The Arkansas Science & Technology Authority awarded \$200,693 in Basic Research Grants to seven state researchers, \$18,450 in an Applied Research Grant, and \$182,292 for 15 Department of Energy/ASTA Traineeships in their Board of Directors' meeting Friday.

The seven Basic Research Grants and the Applied Research Grant awarded totaled \$219,143:

- Dr. Walter G. Bottje of the University of Arkansas, Fayetteville, received \$18,450 for his applied research of factors which lead to ascites in broilers. Ascites, a condition of fluid accumulation in the body cavity, has been associated with weight selected lines of poultry, costing the Arkansas Poultry Industry millions of dollars annually. This grant was matched with a \$20,000 grant from the Arkansas Poultry Federation.
- Dr. Edwin J. Anderson of the University of Arkansas, Fayetteville, received \$35,000 for his study of the production of transgenic spinach resistant to infection by cucumber mosaic virus, an aphid transmitted plant virus.
- Dr. Arthur L. Goetsch of the University of Arkansas, Fayetteville, received \$35,300 for his research to characterize energy and nitrogen metabolism by sheep consuming grasses with varying properties found in different locations across the state.
- Dr. James B. Whitfield also of the University of Arkansas, Fayetteville, received \$26,000 for his study on the correlation of the interaction between wasps and viruses. This research should give insight to insect immune mechanisms and also to potential pest control strategies.

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- Dr. Roger A. Buchanan of Arkansas State University received \$35,500 for his study of calcium activity in astrocytes and neurons of the mammalian brain.
- Dr. David Lindquist of the University of Arkansas at Little Rock received \$25,300 for his study to develop methods and procedures for applying membranes of aluminum and boron phosphates on porous alumina substrates. The success of this project will benefit the aluminum materials industry.
- Dr. Bentley A. Fane also of the University of Arkansas, Fayetteville, received \$27,400 for his research on the in vivo functions of a protein by the site-directed induction of mutation. The results of the research should indicate if cloned genes could have broader applications in biotechnology.
- Dr. Robert E. Miller of the University of Arkansas, Fayetteville, received \$16,193 for his study of periodic structures. The research objective is to derive an approximate model for a truss which leads to numerically tractable algorithms for vibration analysis, parameter estimation and control design.

The Board approved the renewal of fourteen DOE/ASTA Traineeships that receive \$12,500 each, totaling \$175,000: Clinton D. Bryan, Paul Moffitt, Warren Harper, David G. Daniels, James Palmer, David Nelms, Steven E. Elkins, Diane L. Bootz, Christopher C. Kopp, and Matthew Talyor, all of the University of Arkansas, Fayetteville; and, Diana M. Lindquist, G. Douglas Mauldin, Charles M. Byrd, and Chien Wang, all of the University of Arkansas at Little Rock.

The Board also approved a new DOE/ASTA Traineeship. Chris Masters received \$7,292 and is working with Dr. Al Adams at the University of Arkansas at Little Rock on "Development of a Prototype Raman Particle Analyzer, Capable of Probing Suspended Particles Both in a Flow Stream and in a Trapping Cell."